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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,628	08/13/2001	Charles Robert Giardina	3-12-1	8010

7590 11/17/2004

Docket Administrator (Room 3J-219)
Lucent Technologies Inc.
101 Crawfords Corner Road
Holmdel, NJ 07733-3030

EXAMINER

TALAPATRA, ANIKA F

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/928,628	GIARDINA ET AL.	
	Examiner	Art Unit	
	Anika F. Talapatra	2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>13 August 2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc. Correction is required. See MPEP § 608.01(b).

Claim Objections

2. Claims 2-4 objected to because of the following informalities: Claims 2-4 contain the statement "The method of claim 1 comprising:" This is incorrect. The corrected statement should read "The method of claim 1 *further* comprising:" Appropriate correction is required.

3. Claim 8 objected to because of the following informalities: Claim 8 states "The system of claim 1..." Claim 1 comprises a method but not a system. Claim 8 should be dependent on the system in claim 5. Claim 8 should read "The system of claim 5..." Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 3, 4, 5, 6, 7, and 8 rejected under 35 U.S.C. 102(e) as being anticipated by Gentzler (U.S. Patent 6211733) (hereto referred to as Gentzler).

As to claims 1 and 5, Gentzler teaches a method and system for predistortion of an input signal. Once the signal undergoes predistortion, the signal will be input to a distortion generating circuit. The predistortion of the input signal will compensate for the distortion caused by the distortion generating circuit, in effect eliminating distortion of the input signal (see Gentzler, column 2 lines 64-68, columns 3-4, and figures 1 and 2). Gentzler teaches this method comprising a first predistortion stage (figure 1, elements 38 and 40) which is equivalent to the outer predistortion function as claimed by the applicant in claims 1 and 5. This first predistortion stage predistorts the input signal. Gentzler teaches a second predistortion stage (figure 1, elements 66 and 68), which is equivalent to the inner predistortion function as claimed by the applicant in claims 1 and 5. This second predistortion stage further predistorts the input signal received from the first predistortion stage. As well, Gentzler teaches iterations of the control loop in figure 2 (see Gentzler, column 5 lines 4-23 and figure 2). Repeating the predistortion control

loop in figure 2 can also be seen as inner and subsequent outer loops of the predistortion function, as taught by the applicant in claims 1 and 5.

As to claims 2 and 6, Gentzler teaches a first predistortion stage (figure 1, elements 38 and 40). This first predistortion stage predistorts the input signal. The first predistortion stage (figure 1, elements 38 and 40) is generated using an output of the first predistortion stage (figure 1, element 45) and an output of the distortion generating circuitry (figure 1, element 76).

As to claims 3 and 7, Gentzler teaches a second predistortion stage (figure 1, elements 66 and 68). This second predistortion stage further predistorts the input signal received from the first predistortion stage. The second predistortion stage (figure 1, elements 66 and 68) is generated using an output of the second predistortion stage (figure 1, element 70) and an output of the distortion generating circuitry (figure 1, element 81).

As to claims 4 and 8, Gentzler teaches a method and system for predistortion of an input signal prior to a distortion generating circuit, which is equivalent to the method and system claimed by the applicant in claims 4 and 8. Gentzler teaches a method and system for predistortion of an input signal wherein the distortion generating circuitry is an amplifier (see Gentzler, figure 1, element 14). This is equivalent to the distortion generating element claimed by the applicant in claims 4 and 8.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

1. U.S. Patent 5831478, Long;
2. U.S. Patent 6275105, Ghannouchi et al.;
3. U.S. Patent 5789976, Ghannouchi et al.;
4. U.S. Patent Application 2002/0101937, Antonio et al.;
5. U.S. Patent 6169450, Gentzler;
6. U.S. Patent 5386198, Ripstrand et al.; and
7. U.S. Patent 6211733, Gentzler.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anika F. Talapatra whose telephone number is 571-331-1982. The examiner can normally be reached on 08:00-16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


MOHAMMED GHAYOUR
SUPERVISORY PATENT EXAMINER